PATENT COOPERATION TREATY

PCT/JP2005/005401



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NOTHER CATOR OF TRANSMITTAL OF COPIES OF TRANSLATION OF THE INTERNATIONAL PRELIMINARY REPORT OF PARBETABLITY OF THE PART OF TRANSLATION OF THE PARTSHY COOPERATION TRANSLY; (PCT Rules 449a.162 and 72.2) From the INTERNATIONAL BUREAU

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KAWAMIYA, Osamu AOYAMA & PARTNERS IMP Building 3-7, Shiromi 1-chome Chuc-ku Osaka-shi: Osaka 5408001 JAPON

Date of maring (day/month/year) 26 October 2006 (26.10.2006)		
Applicant's or agent's file reference 665138		IMPORTANT NOTIFICATION
International application No. PCT/JP2005/005401		Inscriminal filing date (daymonin/year) 24 March 2005 (24.03.2005)
Applicant	DAINIPPON SUMITOMO	PHARMA CO., LTD. et al

£.	Transmit	ital of the translation to the applicant.
	~	The International Bureau transmits herewith a copy of the English translation of the international preliminary report of patentiality (Chapter I).
		The International Bureau transmits herewith a copy of the English translation of the international preliminary report on putentability (Chapter II):
2.	Transmit	ital of the copy of the translation to the designated or elected Offices.

The international Bureau rotifies the applicant that copies of that translation have been transmitted to the following designated or elected Offices requiring such translation:

None

The following designated or elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the international Bureau only upon their request:

AE, AG, AL, AM, AP, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EA, EC, EE, EG, EF, ES, FI, GB, GD, GG, GH, GM, HR, HU, ID, IL, IN, IS, JF, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LW, MA, MD, MG, MK, MM, MW, MX, MZ, NA, IN, NO, NZ, OA, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any america to the international preliminary report on patentability (Chapter II).

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned within the applicable time limit (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.

ľ	he International Bureau of WIPC
	34, chemps des Colombettes
	1211 Genova 20, Switzerland

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

FOR FURTHER ACTION

(PCT Rule 44bix)

See item 4 below

International application No. International filling date raw/n PCT/JP2005/005401 24 March 2005 (24,03,2005		International filing date (das/month/year) 24 March 2005 (24,03,2005)	Priority date (day/month/year) 26 March 2004 (26.03.2004)	
	ternational Fatent Classification (8th adition unless older adition indicated) se relevant information in Form PCT/ISA/237			
Apph	CIPTON SUMITOMO PHAF	IMA CO., LTD		
}.	This international prelimina International Scarching Am	ity report on patemability (Chapter I) is issued by t thorny under Rule 44 bis 1(a).	the International Bureau on behalf of the	
	es i vermones i			
		total of 5 sheets, including this cover sheet.	and the same of th	
	In the attached sheets, any i to the international prelimin	reference to the written opinion of the International sary report on patentability (Chapter I) instead.	Searching Authorny should be read as a relerence	
3.	This report contains indicat	ions relating to the following items:		
	Box No. 1	Basis of the report		
	Box No. II	Priority	William Programme Control of the Con	
	Box No. III	Non-establishment of opinion with regard applicability	to novelty, inventive step and inclustrial	
	Box No. IV	Lack of unity of invention		
	Box No. V	Reasoned statement under Article 35(2) was applicability; cliations and explanations so	ith regard to movelty, inventive step or industrial apporting such statement	
	Box No. VI	Certain documents caed	4884	
	Box No. VII	Certain defects in the international applica	tion	
	BOX NO. VIII	Certain observations on the international a	pplication	
4	The International Bureau was except where the applicate (Rule 44bir .2).	rill communicate this report to designated Offices is care makes an express request under Article 23(2).	in accordance with Roles 44 <i>bb</i> 3(c) and 93 <i>ba</i> 1 but before the expiration of 30 mornhs from the priority	

	Date of issuance of this report 19 October 2006 (19.10.2006)
The International Bureau of WIPO 34, chemm des Colombettes 3241 Geneva 20, Switzerland	Authorized officer Yoshiko Kuwahara
Pacsimile No. +41 22 338 82 70	e-mail: pt07@wipo.int
Form PCT/IB/375 (January 2004)	

Applicant a or agent's file reference 665138

PATENT COOPERATION TREATY

TRANSLATION brown the INTERNATIONAL SEARCHING AUTHORITY Tim WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis 1) Date of mailing (day/month/year) Applicant's or agent's file reference FOR PURTHER ACTION 665138 See paragraph 2 neion international ampheasure No. international filing date (decomonth/year) Priority date (day/mont/z/veur) PCT/JF2005/005401 24.03.2005 26.03.2004 International Patent Classification (IPC) or both national classification and IPC DAINIPPON SUMITOMO PHARMA CO., LTD. This opinion contains indications relating to the following item:: Box No. 1 Basis of the opinion Box No D Prionty Box No. III Non-enablishment of opinion with regard to novelry, inventors step and industrial applicability Box No IV Lack of unity of invention Reasoned statement under Rule 436rt, Iranii; with regard to sneekly, inventive step or industrial Box No. V applicability; chanons and explanations appearing such statement Box No. VI Certain documents cited Box No. VII. Certain defects in the international application Box No. VID Certain observations on the international application FURTHER ACTION It a demand for international prehinancy examination is made, this operation will be considered to be a written opinion of the international Prolonosary Examining Authority ("IPEA") except that this does not apply where the applicant emposes an Authority other than this one to be the IPEA and the chosen IPEA has nowled the international Eureau under Role 60, this be the written opinions of this International Searching Authority will not be so considered If this opinion is as provided above considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA is written reply together, where appropriate, with amendments, before the expiration of 3 months from the Gate or mariling of form PCT/ISA/23) or before the expiration of 22 months from the proofty date, whichever expired land. For further operant see Form PCT/ISA/120 For mather details, too notes to Form PCT/15A/220 Name and mailing address of the ISAM Facussiie No. Telephone No. FORM PCT/ISA/237 remore theeth reasoner 2000at

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application So.
PCT/JP2005/005401

Sm	No.1	Basis of this opinion
ž.	With	regard to the language, the opinion has been enablished on the hards of the international application in the Language in which is our orders otherwise indicated under this tiem.
		The regimen has been established on the basis of a translation from the original language into the following imageage
		, which is the language of a translation turnshed for the purposes of international tested conder
		Rule 1/3 and 23. feb p
2.	With	regard to any nucleotide antifor amino ucid sequence disclosed in the international application and necessary to the elalined ston, this opinion has been anablished on the hards of.
	a.	type of material
		a sequence listing
		tablers related to the sequence lighing
		would
	h	Jorman of material
		in written fewarat
		in computes readable form
	c	time of filing/hornshing
		contained in the international application as filed.
		- ·
		Hed together with the international application in computer readable form
		Isomished subsequently to this Authority for the purposes of search.
3		in addition, in the same that more than one version or copy of a sequence listing another table, a relating thereto has been fasted or furnished: the required sustainests that the information in the subsquirest or additional copies is identical to true in the application as fixed or does not go beyond the application as fixed, as appropriate, were furnished.
4	Addi	worst comments

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

PCT/JP2005/005401

Itox No. S	 Non-establishmens of opini 	on with regard to novelty, inventive step and industrial applicability	
The quasi-	ons whether the claumed invention have not been examined in respect of	appears to be movel, to involve an inventive step tin be non obvious), or to be instantially	
	the entire international application		
\boxtimes	Gaind Nos 16, 19, 26		
hecan.	e:		
\boxtimes	the said interestional medication or t	the said claims No: 16, 19, 20	
4	relate to the following subject metter	which does not require an international periminary examination caperty ye.	
	the human body by thera	ibed in claims 16, 19, and 20 relate to methods for treatment of	
	ok numan rody by area	47).	
1	the description, classes or drawings is nev so unclear that no meaningful op-	ndicate particular elements beleve) es said clasus Nos.	
	on the same had been an owner that the	more one received characters.	
Ш	the claims or said claims Nos.	are so i madequately supported	
	by the description that no meaningfu	opinion could be formed	
\boxtimes	no management county and the		
	no internstronal search report has been established for said claims Not. 18, 19. 20		
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	See Supplemental Box too juries de	tail;	

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCI/JPGO 05/005403

1. Statement		
Novelty (N)	Channe 1-15, 17, 18, 21-25	YE
	Clums	N()
Inventive step (IS;	Claims 10	YES
	Claim 1-9, 11-15, 17, 18, 21-25	
Industrial applicability (IA)	Claims 1-15, 17, 18, 21-25	YTES
	Claims	NO.

- Citations and explanations.
 - WO 99/28321 A1
 - 2. WO 02/04449 A2

I. Claims 1-9, 11-15, 17, 18, and 21-25

The inventions described in claims 1-9, 11-15, 17, 18, and 21-25 do not appear to involve an inventive step based on documents 1 and 2,

Document 1 describes compounds represented by the general formula (I) useful as antiviral drugs, anticancer drugs, immune disease treatment agents, and so on, and production methods thereof.

In turn, document 2 describes a purine compound useful as an anti-HIV agent, anticancer drug, and so on, and describes said compound as having a substituent corresponding to the 9-position substituent in formula (1) of the present application in the 9-position (see claim 1; description relating to definitions of L and B in line 1 on page 25 to line 4 on page 26, 9-position substituents in compounds of formulas (1), (V), and (IX), etc.).

Consequently, the use of substituents described in document 2 as 9-position substituents in compounds described in document 1 is considered to a matter that could be easily achieved by a berson skilled in the art.

II. Claim 10

The invention described in claim 10 appears to possess novelty and involve an inventive sup over documents 1 and 2.

Documents 1 and 2 neither describe nor suggest the compounds in claim 10 of the present application; in addition. From the descriptions of table 30 in example 12 in the present application, said compounds are considered to achieve exceptional effects that could not be anticipated by a person skilled in the art from the descriptions of documents 1 and 2.